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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,385	11/25/2003	Hanjun Luo	H0678.70008US00	8005
23628 7590 10/17/2007 WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206			EXAMINER GERGISO, TECHANE	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 10/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/723,385

Applicant(s)

LUO ET AL.

Examiner

Techane J. Gergiso

T-G

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This is a Final Office Action in response to the applicant's communication filed on July 30, 2007.
2. Claims 1-5 have been examined.
3. Claims 1-5 are pending.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over IEEE Std 802.1X-2001. Port-Based Network Access Control *Approved 14 June 2001* IEEE-SA Standards Board (hereinafter referred to IEEE) in view of Chow et al. (hereinafter referred to Chow US Pub No.: 2003/0058827).

As per claim 1:

IEEE discloses an 802.1X protocol-based multicasting control method, comprising the following steps:

intercepting a request a message for joining a multicasting group sent from the authenticated subscriber (Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk);

obtaining a port number and a MAC address and a multicast IP address of the subscriber from the request message (Page 78: Description: "The port number, protocol version, and initialization control for a port; Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk);

searching corresponding subscriber account information in the 802.1x authenticated subscriber information according to said port number information and MAC address (figure 8.14-Suppliant PAE State machine; Table 10-1: 9.5.2 Suppliant Statistics).

IEEE does not explicitly teach performing 802.1x authentication for a subscriber and storing authenticated subscriber information and a message for joining a multicasting group and authenticating the subscriber's account number information and the multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise rejecting the subscriber's request. Chow in analogous art, however, teach performing 802.1x authentication for a subscriber and storing authenticated subscriber information and a message for joining a multicasting group and authenticating the subscriber's account number

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information and the multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise rejecting the subscriber's request (0040; The multicast gateway is programmed, for example, by secure web page interactions, so that it contains a list of known user packet addresses or other authentication qualifiers; 0041; An individual carrying an IEEE 802.11-equipped device may then listen to multicast stream(s) containing all current "transmitting" users'; 0051; 0133; 0139; a multicast group is identified based on the subscriber's profile and allocated a multicast address and a new session is initiated.). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by IEEE to include a message for joining a multicasting group and authenticating the subscriber's account number and multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise the subscriber's request is rejected. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a packet-based wireless LANs to emulate person-to-person and person-to-group communications representative of Private Land Mobile Radio Service (PLMRS) often called "push-to-talk" radio suggested by Chow in (0012).

As per claim 2:

IEEE discloses the 802.1X protocol-based multicasting control, comprising: an authentication server at 802.1X authentication end be used to authenticate the subscriber's account number information and the multicasting IP address (Page 78: Description: "The port

number, protocol version, and initialization control for a port; Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk).

As per claim 3:

IEEE discloses the 802.1X protocol-based multicasting control method, wherein the authentications of the subscriber's account number and the multicasting IP address are implemented through verifying whether the multicasting IP address is authorized receive account number information (figure 8.14-Supplicant PAE State machine; Table 10-1: 9.5.2 Supplicant Statistics).

As per claim 4:

IEEE discloses an 802.1X authentication protocol-based multicasting control, wherein if said 802.1X is based on port, when a subscriber attached to said port makes a request for joining in a multicasting group, the subscriber's MAC address is searched for first;

if said MAC address is found, the subscriber's account number information is searched for according to said MAC address and said port number (page 22: Section 8.3.3; Port access restrictions; page 35:portControl; PortEnabled; figure 8-8: Authenticator PAE state machine);

if said 802.1X authentication is based on MAC, when a subscriber attached to said port makes a request for joining in a multicasting group, the subscriber's account number information is searched for directly according to the subscriber's MAC

address and the port number (page 22: Section 8.3.3; Port access restrictions; page 35:portControl; PortEnabled; figure 8-8: Authenticator PAE state machine).

As per claim 5:

Chow discloses the 802.1X protocol-based multicasting control, wherein the subscriber joins in the multicasting group through IGMP protocol (0063; 0079; 0097; 0113).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the notice of reference cited in form PTO-892 for additional prior art

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Techane J. Gergiso** whose telephone number is **(571) 272-3784** and fax number is **(571) 273-3784**. The examiner can normally be reached on 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Emmanuel Moise** can be reached on **(571) 272-3865**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Cynthia Britt*  
**CYNTHIA BRITT**  
**PRIMARY EXAMINER**  
10/15/07

*T-G*  
**Techane Gergiso**  
**Patent Examiner**  
**Art Unit 2137**

October 14, 2007